# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Pat Wood, III, Chairman;

Nora Mead Brownell, Joseph T. Kelliher,

and Suedeen G. Kelly.

New England Power Pool ISO New England Inc.

Docket No. ER04-1255-001

## ORDER CONDITIONALLY ACCEPTING REVISIONS TO APPENDIX E OF MARKET RULE 1

(Issued April 18, 2005)

1. On February 18, 2005, the New England Power Pool (NEPOOL) Participants Committee and ISO New England Inc. (ISO-NE) submitted a filing, which included a cost-benefit analysis, in response to the Commission's December 21, 2004<sup>1</sup> Order on Appendix E of Market Rule 1 related to the Day-Ahead Load Response Program (DALRP). In this order, we conditionally accept the revisions to Appendix E, to become effective June 1, 2005, subject to a further filing as discussed below. This order benefits customers by supporting implementation of a DALRP, which enhances competition and promotes reliability in New England markets.

### **Background**

2. Efforts to create a DALRP in New England began in Spring 2002 when ISO-NE and NEPOOL submitted a filing to initiate Standard Market Design.<sup>2</sup> Provisions relating to load response programs, including provisions relating to the implementation of a DALRP, are in ISO-NE's FERC Electric Tariff No. 3, section III, Market Rule 1, Appendix E.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> ISO New England Inc., 109 FERC ¶ 61,314 (2004) (December 21 Order).

<sup>&</sup>lt;sup>2</sup> Docket No. ER02-2330-000.

<sup>&</sup>lt;sup>3</sup> While a day-ahead demand response program is currently in Appendix E of Market Rule 1, the program has not yet been implemented. Section III.E.2.1 of Appendix E of ISO-NE's tariff states: "The Day-Ahead Demand Response Program will be effective as soon as practicable. The effective date for this program will be the date specified by the ISO and posted on its website."

- 3. On September 29, 2004, ISO-NE filed revisions to Appendix E. Under the proposed DALRP, a demand resource desiring to offer curtailments into the Day-Ahead Energy Market would register in one of the Real-Time Load Response Programs and then could make curtailment offers Day-Ahead if it chose to do so. If a demand resource's offer is not accepted in the DALRP, the resource may participate in the Real-Time Load Response Program in which it is registered.
- 4. ISO-NE stated that program participants in the DALRP will have the opportunity to submit offers on behalf of Demand Resources concurrent with the Day-Ahead Energy Market in increments of 100 kW. ISO-NE stated that the minimum offer price shall be \$50/MWh and the maximum shall be \$1,000/MWh, with a minimum interruption period between one and four hours. ISO-NE will allow these resources to modify their offers on a daily basis.
- 5. ISO-NE explained that DALRP offers that clear the market will be paid the Day-Ahead Locational Marginal Price (LMP) multiplied by the offered interruption amount for all cleared hours. ISO-NE states that Real-Time Load Response deviations, which represent the difference between actual performance in Real-Time and the DALRP cleared interruption amount, are settled at the Real-Time LMP and allocated to the corresponding program participant. Once the DALRP is implemented, the allocation of load response program costs will change from Real-Time Load Obligation to Network Load on a system wide basis.<sup>4</sup>
- 6. ISO-NE proposed a "sequential clearing" methodology that will be used to determine whether to accept a DALRP offer. With the sequential clearing methodology, DADRP offers will not be "integrated" directly into the day-ahead market clearing process. The process for clearing DALRP offers will occur after an approved solution to the Day-Ahead Energy Market has been determined. DALRP offers would be compared to the Day-Ahead LMP resulting from the approved Day-Ahead Energy Market solution. If the demand resource submitted a DALRP offer price (including any curtailment initiation price) less than the Day-Ahead LMP, the DALRP offer would clear.
- 7. In the December 21 Order, the Commission rejected proposed tariff revisions to Appendix E and directed ISO-NE to file revisions to the current Day-Ahead Demand Response Program to incorporate integrated market clearing of demand resources in the day-ahead market instead of the sequential methodology. The Commission stated that:

[T]here must be a direct mechanism in place within the structure of the program that ensures market clearing prices are impacted by demand reductions, instead of simply allowing for the possibility that this will occur through the demand forecasting of market participants as currently proposed. The sequential clearing

<sup>&</sup>lt;sup>4</sup> ISO-NE Tariff, Market Rule 1, Appendix E, section III.E.1.4.

methodology as described in the DALRP fails to accomplish this...Commission policy and previous direction to NEPOOL and ISO-NE has been to ensure that demand response resources are treated on an equal basis with supply resources (footnote omitted).[5]

However, we also stated that if ISO-NE and NEPOOL did not file the requested revisions to incorporate integrated market clearing of demand resources in the day-ahead market, ISO-NE and NEPOOL could file a detailed analysis supporting the claim that the costs of integrated market clearing outweigh the benefits.<sup>6</sup>

#### The February 18 Filing

- 8. ISO-NE and NEPOOL state that the Participants Committee reviewed the benefits and costs associated with both the integrated market clearing of demand resources in the Day-Ahead market and the sequential clearing method contained in the DALRP proposed in the September Filing. They state that the Participants voted to support the sequential approach effective June 1, 2005, to be replaced by an integrated-clearing approach that would be implemented after the infrastructure for direct demand participation is in place as part of the Ancillary Services Market project.<sup>7</sup>
- 9. The February 18 Filing includes a cost-benefit analysis entitled "The Costs and Benefits of Implementing a Day-Ahead Load Response Program" (Neenan Report) conducted by Neenan Associates. The Neenan report analyzed the relative benefits and the costs of implementing the integrated and sequential clearing methodologies. Benefits from the DALRP were assumed to include bill savings due to lower market clearing prices, and hedge savings associated with lower hedge premiums that result from lower prices. A three-year stream of benefits was estimated, based on a variety of market price and customer participation scenarios. Cost estimates for implementing the integrated and sequential methodologies were provided by the ISO-NE.

<sup>&</sup>lt;sup>5</sup> December 21 Order at P 22.

<sup>&</sup>lt;sup>6</sup> On January 21, 2005, ISO-NE and NEPOOL filed a joint motion for an extension of time to make the compliance filing directed by the Commission in the December 21 Order. ISO-NE and NEPOOL submitted the compliance filing on February 18, 2005.

<sup>&</sup>lt;sup>7</sup> ISO-NE stated in its September 29 Filing that the Ancillary Services Markets project is intended to address the concerns raised by the ISO's Independent Market Advisor, will create wholesale markets for ancillary services, and will provide the infrastructure for direct participation by demand in the energy and ancillary service markets.

- 10. The Neenan Report assumed in its analysis that the integrated clearing approach would produce market clearing price reductions and bill savings in both the Day-Ahead and Real-Time markets, along with corresponding hedge benefits. Benefits from the sequential clearing approach were assumed to produce market clearing price reductions and bill savings for only the Real-Time energy market, with more limited associated hedge benefits. 8 ISO-NE's \$4 to \$7 million cost estimate for the integrated clearing approach included the expenses and investments required to modify the Day-Ahead Market system software and conduct substantial software testing and market trials. ISO-NE estimates that the costs of the sequential clearing approach are smaller (\$585,000) and consist primarily of completing software development. The Neenan Report concluded that the costs of implementing the integrated clearing approach at this time, rather than a later date, outweigh the benefits potentially achieved from the integrated clearing approach, but that the incremental costs to complete the sequential clearing approach are less than their associated benefits. Based on the analysis conducted in the Neenan Report, ISO-NE and NEPOOL concluded that the sequential clearing approach is preferable from a cost-benefit standpoint.
- 11. ISO-NE and NEPOOL also state, and the NEPOOL Markets Committee confirmed, that given the level of work involved in developing and implementing an integrated clearing design, it is unlikely that the ISO would be able to develop such a design and implement it in 2005. They state that the Market Participants do not believe that implementation of an integrated clearing design for the DALRP should take priority over the work underway for the Ancillary Services Market project.
- 12. Subsequent to the February 18 Filing, the Commission held a technical conference to review ISO-NE's schedule for implementation of important upgrades to its wholesale market, particularly in the ancillary services markets. The implementation of the DALRP was also a subject of the technical conference. ISO-NE staff and NEPOOL market participants discussed how the phased implementation of DALRP fit into the schedule for the other major and important wholesale market improvements. At the technical conference, ISO-NE stated that a load response program with integrated clearing was likely to be a 12-15 month project. Due to the priority of the ancillary services market and its proposed implementation in June 2006, ISO-NE stated that it

<sup>&</sup>lt;sup>8</sup> The Neenan Report did suggest that there may be an "indirect, but important influence on the level of day-ahead prices" from the sequential clearing approach. February 18 Filing, Attachment 3, page 20.

<sup>&</sup>lt;sup>9</sup> The technical conference was held on March 4, 2005 in Boston, MA and also concerned Docket No. ER02-2330-029.

<sup>&</sup>lt;sup>10</sup> Transcript of Technical Conference on ISO-New England, March 4, 2005, Docket No. ER02-2330-029 and ER04-1255-000 at page 39.

would target the third or fourth quarter of 2007 for integrated clearing. <sup>11</sup> ISO-NE also stated that the sequential clearing program would give participants valuable experience before moving to the integrated system. <sup>12</sup>

#### **Notice of Filings, Interventions and Protests**

- 13. Notice of the March 4, 2005 technical conference was published in the *Federal Register*, 70 Fed. Reg. 6000 (2005) and 70 Fed. Reg. 11010 (2005).
- 14. Notice of the February 18, 2004 Filing was published in the *Federal Register*, 70 Fed. Reg. 11002 (2005), with comments, protests, and interventions due on or before March 7, 2005. The Massachusetts Municipal Wholesale Electric Company (MMWEC), already an intervener in this proceeding, filed a protest. On March 28, 2005, ISO-NE filed an answer to MMWEC's protest.
- 15. MMWEC states that ISO-NE again seeks to justify implementation of a flawed DALRP, under which all network load will be responsible for the costs of a program that will not benefit all network load. MMWEC states that although accepted bids will reduce demand in real time, thereby producing price effects in the real time market, the lack of an integrated market clearing mechanism in the day-ahead market would prevent prices from being impacted in that market by demand reduction bids. MMWEC states that network load which is fully scheduled in the day-ahead market, pays the day-ahead market price, not the real-time market price, and therefore would not benefit from reductions in the real-time market price. MMWEC argues that it is unjust and unreasonable to charge load that is fully scheduled in the day-ahead market for the costs of a program that will not benefit them. MMWEC further states that market participants that benefit from real-time price reductions but have no network load, such as overscheduled generators which settle the deviations between their day-ahead and real-time schedules at the real time market price, would be receiving a free ride.
- 16. MMWEC states that any cost allocation methodology should be just and reasonable in relation to the distribution of benefits of the system, rather than allocating all costs to network load. The most just and reasonable cost allocation methodology, MMWEC argues, would be to assign costs only to those who benefit from demand reductions in the real-time market and consequent reductions in the real-time market price, *i.e.*, to real-time load deviations.
- 17. Finally, MMWEC argues that the Commission should either reject the compliance filing and direct the ISO to implement the integrated clearing model addressed in the December 21 Order, requiring a DALRP in which load reductions participate in the

<sup>&</sup>lt;sup>11</sup> *Id*.

<sup>&</sup>lt;sup>12</sup> *Id*.

market on equal footing with generation, or condition any approval of the implementation of the "sequential methodology" on directly assigning the costs of the program to market participants that benefit from the ISO's approach, *i.e.*, real-time deviations, rather than socializing the costs among all network load customers.

18. In its answer to the MMWEC protest, the ISO-NE argues that adopting MMWEC's proposal to delay implementation until the integrated clearing approach can be conducted will deny the interim benefits of the sequential-clearing DALRP program. ISO-NE also notes that MMWEC's proposed delay in implementation was expressly voted on and rejected by NEPOOL during the January 31, 2005 meeting of the Markets Committee. ISO-NE argues that MMWEC's arguments regarding cost allocation are not properly raised here and have already been addressed by the Commission. According to ISO-NE, the Compliance filing merely reflects the currently-effective market rules previously accepted by the Commission in a February 25, 2003 Order. <sup>13</sup>

#### **Discussion**

- 19. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2004), prohibits an answer to a protest or to an answer unless otherwise ordered by the decisional authority. We will accept the answer of ISO-NE because it has provided information that assisted us in our decision-making process.
- 20. The Commission accepts ISO-NE's revised schedule for the implementation of DALRP contained in the compliance filing because it will provide another opportunity for demand resources in New England to participate in wholesale markets. We agree with ISO-NE and NEPOOL that the phased implementation of the DALRP would be cost-effective and would be reasonable given ISO-NE's schedule for upgrades to its ancillary services markets.
- 21. As ISO-NE stated in the February 18 Filing, "much of the cost of implementing an integrated clearing approach is driven by the current lack of software and metering infrastructure to model, incorporate, and account for load curtailment bids as part of the supply function in the Day-Ahead market and in Real-Time settlement." In the March 4 Technical Conference, ISO-NE indicated that this necessary infrastructure will be implemented in its planned upgrades to the ancillary services market. At the Technical Conference, ISO-NE further explained the desirability of developing a new resource class in the market clearing process called Asset Related Demand. ISO-NE stated that the new resource class will allow the dispatch of supply and demand assets in real-time, incorporate direct demand participation into market clearing and improve the overall

<sup>&</sup>lt;sup>13</sup> ISO New England, Inc., 102 FERC ¶ 61,202 at P 17 (2003).

transparency of markets, on an asset specific basis. According to ISO-NE, tracking load reductions as Asset Related Demand will provide important efficiencies and will ensure that demand response is fully incorporated into the operation of the wholesale market.<sup>14</sup>

- 22. Based on the additional information provided in the February 18 Filing and the March 4 Technical Conference, the Commission sees the value in phasing the implementation of DALRP. Completion of software changes to implement integrated clearing prior to the Ancillary Service Market upgrade would be costly and would not be consistent with the other important upgrades to the ISO-NE markets. Nevertheless, the Commission is concerned about the potential for further delay in implementation. The February 18 Filing does not specify a date for the implementation of integrated clearing. and only specifies that "ISO and NEPOOL plan to replace that sequential approach with an integrated clearing methodology after the infrastructure of for direct demand participation is in place as part of the Ancillary Services Market ('ASM') project." The implementation of full DALRP has already been delayed multiple years. To ensure implementation as soon as practicable, the Commission directs ISO-NE to implement integrated clearing no later than one year following the implementation of Asset Related Demand in the Ancillary Services Market upgrade, or by June 1, 2007, whichever is earlier. 15 ISO-NE is directed to file a plan and any necessary conforming tariff revisions for implementation of an integrated clearing approach, no later than 60 days prior to implementation of the integrated clearing approach.
- 23. The Commission rejects MMWEC's request to change the existing cost allocation for the DALRP. We agree with ISO-NE that the current filing does not seek to change cost allocation of Load Response costs; it only implements the cost allocation method previously accepted by the Commission<sup>16</sup> and incorporated into ISO-NE's tariff.<sup>17</sup> We also find that all loads, not just those who participate in the real-time market, will benefit from the sequential DALRP. Contrary to MMWEC's argument that Network Load will not benefit from sequential clearing, we agree with ISO-NE and the analysis in the Neenan Report that load that participates in day-ahead markets will be positively affected by the proposed DALRP. Once the DALRP is implemented, prices and bids in day-ahead markets should begin to reflect altered (lowered) bidding strategies of market

<sup>&</sup>lt;sup>14</sup> The Neenan Report provides additional support for the cost-effectiveness of a phased implementation of DALRP.

<sup>&</sup>lt;sup>15</sup> ISO-NE stated at the March 4 Technical Conference that the earliest it could implement the integrated clearing approach would be one year following the implementation of Asset Related Demand in the Ancillary Services Market upgrade. However, in the event that unforeseen circumstances delay implementation of Asset Related Demand, implementation of integrated clearing should not be further postponed.

<sup>&</sup>lt;sup>16</sup> ISO New England, Inc., 102 FERC ¶ 61,202 (2003).

<sup>&</sup>lt;sup>17</sup> ISO-NE Tariff, section III, Appendix E.

participants in response to and in anticipation of DALRP bids. Consequently, allocating costs to network load is just and reasonable because it reflects the widespread benefits of the interim (sequential) DALRP. And the anticipation of such benefits may be a reason the NEPOOL Participants supported the proposed revision (with a 77 percent affirmative vote) without changing the cost allocation of DALRP. The Transmission Sector, which along with the Public Power Sector represents Network Load, supported the sequential clearing approach. Allocating DALRP costs to network load here is also consistent with the Commission's previous decision to allocate DALRP costs to network load. Finally, the Commission shares ISO-NE's concern that requiring a change in cost allocation now would require software changes that could delay implementation of the DALRP and could increase implementation costs so as to negate the cost-effectiveness of the sequential approach.

#### The Commission orders:

- (A) The Commission hereby conditionally accepts the revisions to Appendix E of Market Rule 1, to become effective June 1, 2005, subject to a superseding filing as discussed in the body of this order.
- (B) ISO-NE is directed to implement an integrated clearing approach, as discussed in the body of this order, no later than one year following the implementation of Asset Related Demand, or by June 1, 2007, whichever is earlier.
- (C) ISO-NE is directed to file a plan and any necessary conforming tariff revisions for implementation of an integrated clearing approach, no later than 60 days prior to implementation of the integrated clearing approach.

By the Commission.

(SEAL)

Linda Mitry, Deputy Secretary.

<sup>&</sup>lt;sup>18</sup> ISO New England, Inc., 102 FERC ¶ 61,202 at P 17 (2003).